NOTE: Any yellow text shading or red text annotations have been added by ORNL Subject Matter Experts (SMEs). The annotations have been made in order to document (1) certain Forest Service requirements that have been waived or (2) where some requirements for the ORNL participants have been clarified or established within the ORNL Research Safety Summary (RSS) instead. The RSS 7728 is the work control document that governs the ES&H the activities/actions of the ORNL participants doing work at the Marcell Experiment Station.

U.S. Department of Agriculture	1. WORK PROJECT/ACTIVITY	2. LOCATION	3. UNIT
Forest Service	Forest Research	Grand Rapids MN	RWU 4101/4351
JOB HAZARD ANALYSIS (JHA) References-FSH 6709.11 and -12 (Instructions on Reverse)	4. NAME OF ANALYST	5. JOB TITLE	6. DATE PREPARED
7. TASKS/PROCEDURES	8. HAZARDS	9. ABATEMENT ACTIONS Engineering Controls * Substitution * Administrative Controls * PPE	
Dehydration and/or low blood sugar		Provide (in addition to regular meals) fruit and liquids that	
a. Excessive heat 95° to 100° temperatures.		replace the loss of carbohydrates and maintain blood sugar	
b. Long physically demanding work shif	ts.	levels to normal limits. This will be	nefit the government by
c. Working on asphalt surfaces reaching]	reducing employee illness, injury a	nd agency provided
temperatures in excess if 100° Fahrenh	eit.	medical care.	
d. Hot exhaust turbulents and winds cre	ated by		
aircraft (fixed wing and Rotorcraft)			
e. Many locations involve dusty operation	ons (i.e.,		
hover hook-ups, etc.)			
f. Long tours of duty up to 21 days exposure		*NOTE: When extreme weather and burning conditions return to	
g. Not eating a normal diet (meals ready	/ to eat)	normalallowing employees to subsist for themselves this Job	
(MRE's) and freeze dried food.		Hazard Analysis is no longer in effe	ect.
h. to Deter motion sickness.			
		ORNL SME: Also see RSS Question 13.5	
This analysis applies to:		heat and cold stress including the links to	O USHA publications.
Retardant base operations			
Helicopter operations			
Smokejumper operations			
Other airfields, helibases, heliports and	1		
related support operations within Region	on 1.		
*			
*			
			12 DATE

Previous edition is obsolete

(over)

JHA Instructions (References-FSH 6709.11 and .12)	Emergency Evacuation Instructions (Reference FSH 6709.11)	
The JHA shall identify the location of the work project or activity, the name of employee(s) writing the JHA, the date(s) of development, and the name of the appropriate line officer approving it. The supervisor acknowledges that employees have read and understand the contents, have received the required training, and are qualified to perform the work project or activity.	Work supervisors and crew members are responsible for developing and discussing field emergency evacuation procedures (EEP) and alternatives in the event a person(s) becomes seriously ill or injured at the worksite. Be prepared to provide the following information:	
 Blocks 1, 2, 3, 4, 5, and 6: Self-explanatory. Block 7: Identify all tasks and procedures associated with the work project or activity that have potential to cause injury or illness to personnel and damage to property or material. Include emergency evacuation procedures (EEP). Block 8: Identify all known or suspect hazards associated with each respective task/procedure listed in block 7. For example: a. Research past accidents/incidents b. Research the Health and Safety Code, FSH 6709.11 or other appropriate 	 a. Nature of the accident or injury (avoid using victim's name). b. Type of assistance needed, if any (ground, air, or water evacuation) c. Location of accident or injury, best access route into the worksite (road name/number), identifiable ground/air landmarks. d. Radio frequency(s). e. Contact person. f. Local hazards to ground vehicles or aviation. g. Weather conditions (wind speed & direction, visibility, temp). h. Topography. i. Number of person(s) to be transported j. Estimated weight of passengers for air/water evacuation. 	
literature. c. Discuss the work project/activity with participants d. Observe the work project/activity e. A combination of the above		
 Block 9: Identify appropriate actions to reduce or eliminate the hazards identified in block 8. Abatement measures listed below are in the order of the preferred abatement method: a. Engineering Controls (the most desireable method of abatement). For example, ergonomically designed tools, equipment, and furniture. 	JHA and Emergency Evacuation Procedures Acknowledgement We, the undersigned work leader and crew members, acknowledge participation in the development and/or review of this JHA (as applicable) and accompanying emergency evacuation procedures. We have thoroughly discussed and understand the provisions of eac of these documents: SIGNATURE DATE SIGNATURE DATE	
 b. Substitution. For example, switching to high flash point, non-toxic solvents. c. Administrative Controls. For example, limiting exposure by reducing the work schedule; establishing appropriate procedures and practices. d. PPE (least desirable method of abatement). For example, using hearing protection when working with or close to portable machines (chain saws, rock drills portable water pumps) 		
 e. A combination of the above. Block 10: The JHA must be reviewed and approved by a line officer. Attach a copy of the JHA as justification for purchase orders when procuring PPE. 		
Blocks 11 and 12: Self-explanatory.		

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